Accepta 2032

Date issued: 01-06-2004

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Product Name:

ACCEPTA 2032

Application:

Sodium Polyacrylate

Company Identification:

Accepta Ltd.

Quay West

Trafford Wharf Road

Manchester M17 1HH

United Kingdom

Office telephone number:

+44 (0) 161 240 2100 +44 (0) 870 135 6389

Office fax number:

Emergency Telephone Number:

+44 (0) 161 240 2100

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL DESCRIPTION: Water, Polymer.

HAZARDOUS INGREDIENTS: This product is not classified as hazardous (European Directive 88/379/EEC)

3. HAZARD IDENTIFICATION

HUMAN HEALTH HAZARDS: Acute

INHALATION: May cause irritation of mucous membranes.

SKIN CONTACT: Can cause mild imitation.

EYE CONTACT: Can cause mild irritation.

INGESTION: May cause mucosal damage.

ENVIRONMENTAL HAZARDS:

PHYSICAL AND CHEMICAL HAZARDS:



Accepta 2032

Date issued: 01-06-2004

4. FIRST AID MEASURES

INHALATION: Remove to fresh air, rest, treat symptomatically. Obtain medical attention.

SKIN CONTACT: Remove contaminated clothing. Wash off affected area immediately with plenty of water. If skin irritation persists, obtain medical attention.

EYE CONTACT: Immediately gently irrigate with clean water for at least 15 minutes. Move eyeball and keep eyelids wide open and apart whilst irrigating. Obtain medical attention.

INGESTION: Rinse mouth immediately and repeatedly with water. Do not induce vomiting without medical advice. Obtain medical attention.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water spray, Carbon dioxide, Dry sand, Foam.

FIRE AND EXPLOSION HAZARD: Oxides of carbon, Oxides of sulphur,

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING: In case of fire, wear a full face positivepressure self contained breathing apparatus and protective suit

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Use personal protective equipment recommended in Section 8

ENVIRONMENTAL PRECAUTIONS: Do not allow to enter sewers or water courses. If spillage does enter sewers or water courses, immediately inform the appropriate water authorities.

METHODS FOR CLEANING UP:

Small spills: Soak up with inert absorbent material. Clean up promptly by scoop or vacuum. Large spills: Dam up. Reclaim into recovery or salvage drums. Wash site of spillage thoroughly with water.

Spill may be slippery.



Accepta 2032

Date issued: 01-06-2004

7. HANDLING AND STORAGE

HANDLING: Avoid contact with skin and eyes. Use with adequate ventilation.

STORAGE CONDITIONS: Keep container tightly closed and in a well-ventilated place.

CONSTRUCTION MATERIAL COMPATIBILITY.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS: None.

ENGINEERING MEASURES: General ventilation is recommended.

RESPIRATORY PROTECTION: Respiratory protection not normally needed. If significant mists,

vapours or aerosols are generated an approved respirator is recommended.

HAND PROTECTION: Impervious gloves.

SKIN PROTECTION: Standard protective clothing. EYE PROTECTION: Chemical splash goggles.:

HYGIENE RECOMMENDATIONS: Keep an eye wash fountain available. Keep a safety shower available. Wash hands at breaks and at the end of the shift. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

NOTE: These physical properties are typical values for this product

FORM: Liquid

COLOUR: Light yellow ODOUR: None

BOILING POINT: >100 °C

RELATIVE DENSITY: 1.31

SOLUBILITY IN WATER: Complete

pH 7.2

FREEZING POINT: -20 °C

Abbreviation: NE = not evaluated, NA = not applicable, NR = not relevant



Accepta 2032

Date issued: 01-06-2004

10. STABILITY AND REACTIVITY

STABILITY: Stable under ambient conditions.

CONDITIONS TO AVOID: Freezing temperatures.

MATERIALS TO AVOID: Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, Oxides of sulphur (under fire conditions).

11. TOXICOLOGICAL INFORMATION

Please refer to section 3 for hazards identification. **ACUTE TOXICITY DATA: ACUTE LETHALITY VALUES:** LD50 = Oral (rat) =>5000 mg/kg. LD 50 = Dermal (rabbit) =>20000 mg/kg. PRIMARY (DRAIZE TEST) SKIN/EYE:

12. ECOLOGICAL INFORMATION

LC 50/96H/Lepomis macrochirus (Bluegill Sunfish)= >1000 ppm. LC 50/48H/Daphnia magna (Water Flea) = 590 ppm.

PERSISTENCY AND DEGRADATION:

MOBILITY AND BIOACCUMULATION POTENTIAL:

ECOTOXICOLOGICAL EFFECTS:

ADDITIONAL ECOLOGICAL DATA:



Accepta 2032

Date issued: 01-06-2004

13. DISPOSAL CONSIDERATIONS

Via authorized contractor. If this product becomes a waste, the final user must define and assign the appropriate European Waste Catalogue code.

NATIONAL REGULATIONS UK In accordance with the Environmental Protection (Duty of Care) Regulations 1991.

14. TRANSPORT INFORMATION

Class: Not regulated

15. REGULATORY INFORMATION

CLASSIFICATION:

HAZARD SYMBOL: Not applicable

Contains: -

RISK PHRASES: This product is not classified as hazardous (European Directive 88/379/EEC). SAFETY PHRASES: S24/25 Avoid contact with skin and eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28 After contact with skin, wash immediately with plenty of water. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

NATIONAL REGULATIONS GERMANY

VbF-Klasse: None

WHG-WGK: 1 Classification according VwVwS v. 17.05.99, Anhang 4

TA-Luft: -

Berufsgenossensch. Vorschriften: None

Hinweise zur Beschäftigungsbeschränkung: None

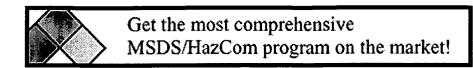
NATIONAL REGULATIONS UK: COSHH regulations apply.



Accepta 2032

Date issued: 01-06-2004

16. OTHER INFORMATION	
Emergency Telephone Number +44 (0) 161 240 2100	



SECTION I - Material Identity

SECTION II - Manufacturer's Information

SECTION III - Physical/Chemical Characteristics

SECTION IV - Fire and Explosion Hazard Data

SECTION V - Reactivity Data

SECTION VI - Health Hazard Data

SECTION VII - Precautions for Safe Handling and Use

SECTION VIII - Control Measures

SECTION IX - Label Data

SECTION X - Transportation Data

SECTION XI - Site Specific/Reporting Information

SECTION XII - Ingredients/Identity Information

SECTION I - Material Identity

Item Name

Part Number/Trade Name NALCO 4337 LIQUID

National Stock Number 6850PN4337

CAGE Code 89524

Part Number Indicator A

MSDS Number 185788

HAZ Code B

SECTION II - Manufacturer's Information

Manufacturer Name NALCO CHEMICAL COMPANY

Street ONE NALCO CENTER

City NAPERVILLE

State IL Country US

Zip Code 60563-1198

Emergency Phone 800 424-9300 CHEMTREC

Information Phone 630 305-1000

MSDS Preparer's Information

Date MSDS Prepared/Revised 16JUN97

Active Indicator

N

Alternate Vendors

SECTION III - Physical/Chemical Characteristics

Hazard Storage Compatibility Code NRC License Number	NR NR
Net Propellant Weight (Ammo)	NR
Appearance/Odor	CLEAR WATER-WHITE, LIQUID, ORGANIC ODOR
Boiling Point	NR
Melting Point	20 F
Vapor Pressure	NR
Vapor Density	NR
Specific Gravity	1.23
Decomposition Temperature	NR
Evaporation Rate	NR
Solubility in Water	COMPLETE
Percent Volatiles by Volume	NR
Chemical pH	3.6-4.0
Corrosion Rate	NR
Container Pressure Code	1
Temperature Code	4

SECTION IV - Fire and Explosion Hazard Data

Flash Point Method	PMCC
Lower Explosion Limit	NR
Upper Explosion Limit	NR
Extinguishing Media	THIS PRODUCT WOULD NOT BE EXPECTED TO BURN UNLESS ALL THE WATER IS BOILED AWAY. USE WATER TO COOL EXPOSED CONTAINERS
Special Fire Fighting Procedures	WEAR SCBA AND FULL PROTECTIVE CLOTHING
Unusual Fire/Explosion Hazards	MAY EVOLVE NOX UNDER FIRE CONDITIONS

SECTION V - Reactivity Data

Product State Code

Stability	YES
Stability Conditions to Avoid	NR
Materials to Avoid	STRONG OXIDIZERS (CHLORINE,

PEROXIDES, CHROMATES, NITRIC

ACED, PERCHLORATES, CONCENTRATED OXYGEN,

PERMANGANATES)

Hazardous Decomposition Products

MAY EVOLVE NOX UNDER FIRE

CONDITIONS

Hazardous Polymerization

Polymerization Conditions to Avoid

LD50 - LD50 Mixture

NR NR

NR

SECTION VI - Health Hazard Data

Route of Entry: Skin YES
Route of Entry: Ingestion YES
Route of Entry: Inhalation YES

Health Hazards - Acute and Chronic

[EYES] MAY CAUSE IRRITATION
WITH PROLONGED CONTACT [SKIN]
MAY CAUSE IRRITATION WITH
PROLONGED CONTACT [INHAL] NR

[INGEST] "DO NOT TAKE
INTERNALLY . NO SYMPTOMS

EXPRESSED

Carcinogenity: NTP NO
Carcinogenity: IARC NO
Carcinogenity: OSHA NO

Symptoms of Overexposure

[EYES] MAY CAUSE IRRITATION
WITH PROLONGED CONTACT [SKIN]
MAY CAUSE IRRITATION WITH
PROLONGED CONTACT [INHAL] NR
[INGEST] "DO NOT TAKE

INTERNALLY . NO SYMPTOMS

EXPRESSED

Medical Cond. Aggrevated by Exposure

Emergency/First Aid Procedures

NR

[EYES] FLUSH W/ WATER FOR 15 MINUTES [SKIN] WASH W/ SOAP AND WATER, REMOVE CONTAMINATED CLOTHING, LAUNDER BEFORE REUSE [INHAL] REMOVE TO FRESH AIR [INGEST] DO NOT INDUCE

VOMITING, NEVER GIVE ANYTHING

TO AN UNCONSCIOUS PERSON

SECTION VII - Precautions for Safe Handling and Use

Steps if Material Released/Spilled

LARGE SPILLS: DIKE TO PREVENT FURTHER MOVEMENT AND RECLAIN=M INTO RECOVERY OR SALVAGE DRUMS OR TANKS SMALL SPILLS: CONTAIN WITH ABSORBENT MATERIAL, SUCH AS CLAY, SOIL OR ANY COMMERCIALLY AVAILABLE

ABSORBENT

Neutralizing Agent

Waste Disposal Method DISPOSE IAW FEDERAL, STATE,

LOCAL REGS

KEEP CONTAINER CLOSED WHEN NOT Handling and Storage Precautions

IN USE

NR

Other Precautions NR

SECTION VIII - Control Measures

Respiratory Protection IS NOT NORMALLY NEEDED SINCE

THE VOLATILITY AND TOXICITY

ARE LOW

NR

Ventilation GENERAL VENTILATION IS

RECOMMENDED

USE IMPERMEABLE GLOVES Protective Gloves

CHEM GOGGLES Eye Protection

EYE WASH FOUNTAIN AND SAFETY Other Protective Equipment

SHOWER IS RECOMMENDED

WASH HANDS AFTER USE Work Hygenic Practices

Supplemental Health/Safety Data

Disposal Code

SECTION IX - Label Data

Protect Eye YES YES Protect Skin Protect Respiratory NO

Chronic Indicator NO Contact Code

UNKNOWN Fire Code UNKNOWN UNKNOWN Health Code React Code UNKNOWN

Specific Hazard and Precaution NO TARGET ORGANS LISTED

SECTION X - Transportation Data

15 Container Quantity Unit of Measure GL

SECTION XI - Site Specific/Reporting Information

Volatile Organic Compounds (P/G) .3

Volatile Organic Compounds (G/L) 35.9517

SECTION XII - Ingredients/Identity Information

Ingredient #	01
Ingredient Name	ACRYLATE POLYMER
Proprietary	YES
Percent	0
OSHA PEL	NR
ACGIH TLV	NR
Ingredient #	02
Ingredient Name	INORGANIC SALTS
Proprietary	YES
Percent	0
OSHA PEL	NR
ACGIH TLV	NR
Ingredient #	03
Ingredient Name	WATER
CAS Number	7732185
Proprietary	NO
Percent	0
OSHA PEL	NR
ACGIH TLV	NR



MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Norsocryl® D-60

EFFECTIVE DATE: 16 June 2005

CHEMICAL FAMILY: Polyacrylate salt

CHEMICAL NAME:

Sodium polyacrylate

COMPANY IDENTIFICATION: Emerging Technologies Inc. 1005 Norwalk Street Greensboro, NC 27407 USA

EMERGENCY TELEPHONE: 24 hours a day, 7 days a week

CHEMTREC 1-800-424-9300

COMPANY CODE: EMTE

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT NAME

CAS NUMBER

Typical %

OSHA Hazard

Sodium Polyacrylate

9033-79-8

>99

The substance(s) marked with a "Y" in the OSHA column are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

The components of this product are all on the TSCA Inventory list.

SECTION 3 – HAZARDS IDENTIFICATION

Emergency Overview

White Odorless Powder
CAUTION!
MAY CAUSE EYE AND SKIN IRRITATION
MAY FORM EXPLOSIVE DUST-AIR MIXTURES
IMPROPER TRANSFER MAY CAUSE ELECTROSTATIC SPARK

Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on its composition, it is anticipated to be slightly irritation to eyes and skin. Repeated or prolonged inhalation may cause cough, shortness of breath, wheezing, and impairment of lung function. Medical conditions that may be aggravated by exposure to this material include lung disease or limited respiratory capacity.

Effective Date: 06/16/05 Revision: 4 Page 1 of 6



SECTION 4 -FIRST AID MEASURES

IF IN EYES: Immediately flush with plenty of water. Remove particles remaining under the eyelids. Get medical attention if irritation persists.

IF ON SKIN, immediately wash with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Thoroughly clean shoes before reuse.

IF SWALLOWED, do NOT induce vomiting. Give water to drink. Get medical attention immediately. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED: Remove to fresh air. If breathing is difficult, get medical attention.

SECTION 5 - FIRE-FIGHTING MEASURES

Fire and Explosive Properties

Auto -Ignition Temperature > 440 °C

Flash Point NA

Flammable Limits - Upper NA

NA

Lower

Flash Point Method

Extinguishing Media

Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions

Do NOT use a solid stream of water. A solid stream of water can cause a dust explosion. Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards

Dust can ignite or explode under extreme conditions. NOTE: For any operation involving this product, use only Class II electrical equipment. Ensure that all equipment is adequately grounded. As with any dry material, pouring this product or allowing it to free fall or to be conveyed through chutes or pipes can accumulate and generate electrostatic sparks, potentially causing ignition of the material itself, or of any flammable materials which may come in contact with the material or its container.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Stop the leak, if possible. Ventilate the space involved. Absorb, sweep up, place in container for disposal. Reduce dust spreading with a water spray. Shut off or remove all ignition sources. Prevent waterway contamination. Construct a dike to prevent spreading. Protect workers with water spray. Collect run-off water and transfer to drums or tanks for later disposal. Avoid creating a dusty atmosphere. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Clean up procedures: Transfer to containers, preparatory for later disposal. Avoid generation of dusts. Place in non-sparking containers for recovery or disposal. Remove from spill location. Flush area with water spray, collect rinsate.

Effective Date: 06/16/05 Revision: 4 Page 2 of 6



SECTION 7 – HANDLING AND STORAGE

Handling

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing dust and processing vapors. Keep container tightly closed. Process using adequate ventilation. Avoid creating dusts in handling, transfer or clean up. Keep away from heat, sparks, and flames. Avoid breathing dust. Dust particles absorb water and swell upon contact with moist tissue. CONTAINER HAZARDOUS WHEN EMPTY. Emptied container retains product residual. FOLLOW LABELED WARNINGS EVEN AFTER CONTAINER IS EMPTIED. RESIDUAL DUSTS MAY EXPLODE ON IGNITION. DO NOT CUT, GRIND, OR WELD ON OR NEAR THIS CONTAINER. Improper disposal or reuse of this container may be dangerous and/or illegal.

Storage

Store in a cool dry place. This material is not hazardous under normal storage conditions; however, material should be stored in closed containers, in a secure area to prevent container damage and subsequent spillage.

SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls

Investigate engineering techniques to reduce exposures. Provide ventilation if necessary to minimize exposure. Dilution ventilation acceptable, but local mechanical exhaust ventilation preferred, if practical, at sources of air contamination such as open process equipment.

Eye Protection

Where eye contact may be likely, wear chemical goggles and have eye-flushing equipment available.

Skin Protection

Minimize skin contamination by following good industrial practice. Wearing protective gloves is recommended for substances in solid form (i.e., powders, pellets, and granules). Wash hands and contaminated skin thoroughly after handling.

Respiratory Protection

Avoid breathing fumes. Use NIOSH approved respiratory protection equipment appropriate to the material and/or its components where airborne exposure is likely. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer.

For emergency and other conditions where there may be a potential for significant exposure, use an approved full-face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR 1910.134.

Other Exposure Limits - Ingredients

*OSHA and ACGIH have not established specific exposure limits for this material. However, OSHA and ACGIH have established limits for nuisance dusts which are the least stringent exposure limits applicable to dusts. The OSHA PEL/TWA for nuisance dusts is 15 mg/m³ total dust (TD), and 5 mg/m³ respirable dust (RD). The ACGIH TLV/TWA for nuisance dusts called Particulates Not Otherwise Classified (PNOC) is 10 mg/m³ inhalable particulate and 3 mg/m³ respirable particles.

Airborne Exposure Guidelines for Ingredients

The components of this product have no established Airborne Exposure Guidelines.

- -Only those components with exposure limits are printed in this section.
- -Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.
- -ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause other allergic reactions.
- -WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.

Effective Date: 06/16/05 Revision: 4 Page 3 of 6



SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor

White Odorless Powder

pН NE Specific Gravity Vapor Pressure NA Vapor Density NA **Melting Point** NE

Freezing Point **Boiling Point**

NA

NA

Solubility in Water

Insoluble

Bulk Density

650 - 800 kg/m³

SECTION 10-STABILITY AND REACTIVITY

Stability

This material is chemically stable under normal and anticipated storage and handling conditions.

Incompatibility

Contact with acids and strong oxidizing agents may cause a low energy release in the presence of air. Product swells in presence of water.

Hazardous Decomposition Products

Oxides of carbon and nitrogen can be liberated at high temperatures.

SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicological Information

Sodium polyacrylate

Single exposure (acute) studies indicate that this material is no more than slightly toxic to rats if swallowed (LD50 2,000 mg/kg) or is absorbed through skin (LD50 > 2,000 mg/kg), slightly irritating to rabbit eyes, and non-irritating to rabbit skin. No skin allergy was observed in guinea pigs or humans following repeated exposure. No adverse effects were observed following repeated application to the skin of rats. Repeated inhalation produced an increased incidence of lung tumors related to chronic alveolar inflammation in rats. No birth defects were observed in the offspring of rats following exposure during pregnancy. No genetic changes were observed in tests using bacteria or animals.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicological Information

Sodium Polyacrylate

This material is practically non-toxic to Daphnia magna (48-hr EC50 > 1000 mg/l), trout (96-hr LC50 700 mg/l), bluegill sunfish (96-hr LC50 > 1000 mg/l), zebra fish (96-hr LC50 > 200 mg/l), earthworms (96-hr LC50 > 1000 mg/l), and algae (EC10 180 mg/l). The EC50 value for bacteria (sludge O2/glucose consumption) was > 100 mg/l.

Page 4 of 6 Effective Date: 06/16/05 Revision: 4



SECTION 12 - ECOLOGICAL INFORMATION, continued

In a 21-day daphnia magna reproductive study, the NOEC was 6/6 mg/l. The NOEC value in a chronic early life stage with fathead minnows was 56 mg/l.

Chemical Fate Information

Sodium polyacrylate

This material was evaluated in a semi-continuous activated sludge (SCAS) test, and 37.5% removal was noted. In the continuous activated sludge (CAS) test, there was 75% overall removal with 3 mg/l test concentrations and 62% overall removal with 10 mg/l test concentration. Lowering the molecular weight by ozonization improved the biodegradability. Material of molecular weight 1000 to 100 biodegraded during 34 days of incubation in riverbed mud, but some of the lower molecular weight compounds produced in the ozonization process remained. In CO_2 evolution assays, CO_2 evolution ranged from 8.1 to 15.6%.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal

Recover, reclaim, or recycle when practical.

Disposal via incineration is recommended. Appropriate pretreatment and disposal in an authorized landfill is acceptable. In all cases, dispose of material in accordance with all applicable federal, state, and local laws and regulations. Consult appropriate regulatory officials or your attorney for information on such disposal.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

SECTION 14 – TRANSPORTATION INFORMATION

DOT Name

Not regulated

DOT Technical Name

DOT Hazard Class UN Number

DOT Packing Group

PG

RQ

Effective Date: 06/16/05 Revision: 4 Page 5 of 6



SECTION 15 - REGULATORY INFORMATION

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

Immediate (Acute) Health

Υ Fire N

Delayed (Chronic) Health

Ν Reactive N

Sudden Release of Pressure

Ν

INVENTORIES:

EINECS (EU): conforms TSCA (USA): conforms AICS (Australia): conforms ECL (Korea): conforms

Ingredient Related Regulatory Information:

SARA Reportable Quantities

CERCLA RQ

SARA TPQ

Sodium polyacrylate

NE

SECTION 16 – OTHER INFORMATION

Revision Information:

Revision Date:

16 June 2005

Supercedes Revision Dated:

1 December 2004

Reason for Revision: Update Section 1.

Key:

N/A - Not Applicable

NE - Not Established

IMPORTANT: The following supercedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach or warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended condition of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

Revision: 4 Page 6 of 6 Effective Date: 06/16/05

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION

PRODUCT NAMES: TRAMFLOC® 1000-1019

DATE ISSUED: 06/01/04

SUPERSEDES: 08/25/99

DESCRIPTION: Polyacrylate, Super Absorbent Polymer

TRAMFLOC, INC. P. O. Box 350 Tempe, AZ, 85280-0350 480-491-6895

EMERGENCY TELEPHONE: 24 hours a day, 7 days a week, CHEMTREC: 800-424-9300

SECTION 2 - COMPOSITION and INFORMATION ON INGREDIENTS

CHEMICAL NAME

CAS NUMBER

Potassium acrylate, crosslinked

09003-04-7

Post treated

Trade secret

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: White, free flowing dry powder or crystals with little or no odor. Spills are very slippery. Avoid contact with skin, eyes and clothing. Contact with eyes may produce irritation and/or redness. Inhaled dust may cause some respiratory irritation.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Eye contact may produce slight irritation and/or redness.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Not available.

EFFECTS OF OVEREXPOSURE - INHALATION: Inhaled dust may cause some respiratory irritation.

EFFECTS OF OVEREXPOSURE: INGESTION: Not available.

EFFECTS OF OVEREXPOSURE: CHRONIC HAZARDS: Not available.

PRIMARY ROUTE OF ENTRY: Eyes, Inhalation.

SECTION 4 - FIRST AID MEASURES

INHALATION: Remove patient to fresh air.

SKIN: Remove contaminated clothing and launder before reuse. Wash affected area with soap and water for at least 15 minutes.

EYE CONTACT: Flush with water at least 15 minutes with eyelids open. Call a physician. INGESTION: Do not give an emetic unless directed by a physician. Never give anything by mouth to an unconscious person.

Product Names: TRAMFLOC® 1000-1019

SECTIONS 5 - FIRE FIGHTING MEASURES

FLASHPOINT: NA; FLAMMABILITY: NA; AUTO FLAMMABILITY: NA

EXPLOSION HAZARD: Dust in sufficient concentration can result in an explosive-mixture in air. EXPLOSIVE LIMITS: LOWER: NA; UPPER: NA

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical or foam to extinguish.

EXTINGUISHING MEDIA WHICH MUST NOT BE USED: Care must be taken when using water, as spilled product is extremely slippery when wet.

SPECIAL EXPOSURE HAZARDS IN A FIRE: In fire situation, may liberate oxides of nitrogen or carbon and hydrogen chloride. Keep containers cool by spraying with water if exposed to fire.

SPECIAL PROTECTIVE EQUIPMENT FOR A FIRE: Self-contained breathing apparatus should be worn.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

ENVIRONMENTAL PRECAUTIONS: Avoid runoff into storm sewers and ditches which lead to waterways.

METHODS FOR CLEANUP: Product becomes slippery and difficult to handle when wet; spills are best handled while dry. Sweep up and collect dry product. Absorb wet product with vermiculite or other inert material then water wash area to waste treatment.

OTHER INSTRUCTIONS: Dispose of solidified material in accordance with federal, state, local or other applicable laws and regulations.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Avoid contact with eyes, skin and clothing.

STORAGE: Avoid extremes of temperature: wet damp or humid conditions.

SECTION 8 - EXPOSURE CONTROLS and PERSONAL PROTECTION

ENGINEERING CONTROLS: General ventilation is recommended. Eyewash and safety shower stations are recommended.

EXPOSURE GUIDELINES: No MAC values have been established.

PERSONAL PROTECTIVE EQUIPMENT: See below

RESPIRATORY PROTECTION: Use NIOSH approved dust respirator (ANSI Z 882.1980) or equivalent, as required to control exposure.

HAND PROTECTION: Wear impervious gloves. EYE PROTECTION: Wear chemical splash goggles or face mask. SKIN PROTECTION: If clothing is contaminated, wash skin and launder clothing,.

NOTE: Before eating, drinking or smoking, wash face and hands thoroughly with soap and water.

Product Names: TRAMFLOC® 1000-1019

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE, COLOR AND ODOR: White free flowing dry powder with little or no odor.

pH as is: NA; MELTING POINT/RANGE: >400° F; BULK DENSITY: 0.4-0.7

WATER SOLUBILITY: Insoluble. PARTICLE SIZE, mm: Tramfloc 1001, 0-1; Tramfloc 1002, 2-4; Tramfloc 1009, 1-2.

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable. CONDITIONS TO AVOID: None.

MATERIALS TO AVOID: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Not listed as a carcinogen by IARC, NTP, OSHA or ACGIH. The OSHA 8-hour TWA for total dust is 15 mg/M³ (5 mg/M³ for the respirable fraction). The ACGIH TLV-TWA is 10 mg/m³. Product as produced is generally regarded as safe for recovered and reused products used in human and animal food formulation components.

IRRITANCY AND CORROSIVENESS: May be slightly irritating to skin and eyes on prolonged exposure. No evidence of corrosiveness.

SENSITIZATION: None known.

SUBACUTE, SUBCHRONIC AND PROLONGED TOXICITY: No information available.

EMPIRICAL DATA ON EFFECTS ON HUMANS: Considered non-toxic in normal use.

SECTION 12 - ECOLOGICAL INFORMATION: NA

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Recycle if possible. If not, absorb spilled material on inert absorbent and dispose of solidified material in accordance with federal, state, local or other applicable laws and regulations.

SECTION 14 - TRANSPORTATION INFORMATION: Non-Hazardous, Non-Regulated

SECTION 15 - REGULATORY INFORMATION

U. S FEDERAL REGULATIONS: CERCLA-SARA Hazard Category: No SARA Section 313 components exist in this product.

INVENTORY INFORMATION:

EEC EINECS: All components of this product are included on the European Inventory of Existing Chemical

Product Names: TRAMFLOC® 1000-1019

Substances (EINECS) in compliance with Council Directive 67/548/EEC as amended.

US TSCA: This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C.

CANADA DSL: Components of this product have been reported to Environment Canada in accordance with subsection 25 of the Canadian Environmental Protection Act and are included on the Domestic Substances List.

SECTION 16 - OTHER INFORMATION

HMIS RATINGS: HEALTH: 1; FLAMMABILITY: 1; REACTIVITY: 0; PROTECTION: F

The information contained herein is to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, Tramfloc, Inc. makes no guarantee for results obtained, and assumes no responsibility for damages incurred by use of this product. It is the responsibility of the user to comply with all federal, state, and local laws and regulations.

MATERIAL SAFETY DATA SHEET:

OSHA Standard 29 CFR 1910

> NE = not establishedNA = not applicable

PRODUCT IDENTITY:

SBG-1 Solidifying Blue Ice Gel

Superabsorbent/Household Cleaner

SECTION 1

Manufacturer:

UrinBiz.com

Emergency Telephone: (630) 968-

8163

Address:

6226 So. Parkside

Chicago, IL 60638

Date Prepared: December

2000

SECTION II - Hazardous Ingredients/Identity Information

Chemical Identity/Common name

% CAS# OSHA PEL

OSHA STEL

ACGIH TLV

Poly (sodium acrylate) homoploymer .875

9033-79-8

NE

NE

NE

Or sodium salt of poly acrylic acid

Cocamide MEA

.025 68140-00-1

NE

Sodium Lauryl Sulfate

.0125 151-21-3

NE

Sodium Bicarbonate

.03125 144-55-

8/m3

irritant

Other Limits

Recommended:

SARA Section 313 – Reportable Toxic Chemicals – NONE

SECTION III - Physical Data

Appearance: White, granular powder, Blue chips Odor: Slight Acrylate odor, heavy pine/floral scent

Boiling Point: Solid NA

Melting Point: decomposes above 500 F

Vapor Pressure: Less than 1- mm Hg

Vapor Density: NA >1

Evaporation Rate: less than 1

Specific Gravity: NA Bulk Density <1 (H2O=1)

1:46

Solubility: Insoluble, Swells in water

% Volatile by Volume: .0192625%

SECTION IV - Fire and Explosion Hazard Data

Flash Point: none

Flammable Limits: NE

LEL: NE

UEL: NE

Extinguishing Agents: Water, CO2, Dry Chemical Extinguishants and Halon

Special Fire Fighting procedures: none

Unusual Fire Hazards: Very slippery when product comes in contact with water

SECTION V - Reactivity Data

Stability: Stable

Conditions to Avoid: None Known

Incompatibility: Avoid contact with strong oxidizing agents. Avoid moisture and high temperatures. Decomposition Products/Acclamation: Carbon, oxides of carbon & sodium, water. Acclamates under traditional waste disposal methods such as municipal sewage systems, composting systems and dry landfills.

Thermal decomposition may produce formaldehyde and oxides of carbon, nitrogen and sulfur.

Hazardous Polymerization: Will Not Occur Conditions to Avoid: None known

SECTION VI - Toxicity and First Aid

Routes of entry:

Inhalation: yes

Skin: no

Ingestion: no

Health hazards: (Acute & Chronic): Inhalation may cause mild irritation of upper respiratory tract. Inhalation experiments with animals on similar polyacrylate polymer (using very small particles of less than 10 microns)

produced inflammatory tissue response in the lungs. Ingestion may also cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Carcinogenicity:

NTP? NO

ARC Momographs? NO

OSHA Registered? NO

Signs and Symptoms of Exposure: Dust may cause reddening, drying of affected area with possible burning or other discomfort. Irritation of the upper respiratory tract and/or eyes.

Medical conditions aggravated by exposure: Existing respiratory and allergic conditions

First Aid and Treatment:

Eyes: Flush thoroughly for 15 minutes with water or approved eye wash. If

irritation persists seek medical assistance

Skin: Clean thoroughly with large amounts of water, then soap and water.

Inhalation: Move to fresh air source, if discomfort persists, consult a physician

Ingestion: Drink 2-3 glasses of water. Do not induce vomiting. Do not give liquids if unconscious.

SECTION VII - Precautions for Safe handling and Use

Spill Procedure: Collect material and avoid flushing with water if possible. Polymer becomes extremely slippery if flushed with water. Dispose of spilled

material in trash

Disposal: Waste can be gathered and disposed of in accordance with existing

local, state and federal environmental regulations. Nonhazardous materialsuitable for disposal in approved solid waste landfills. May be safely flushed down a municipal toilet.

Precautions for safe storage & handling: Avoid eye contact. Avoid prolonged or repeated skin contact. Do not inhale. Do not ingest. Store in a cool dry place. Close containers when not in use.

Other Precautions: Dusty conditions may irritate the eyes and respiratory system. Wear safety goggles and nuisance dust mask where dust is created. Blue dye may temporarily stain hands and skin. Wear gloves when handling.

SECTION VIII - Control Measures

Respiration: Use high efficiency filter mask for dust particle levels above 0.05 mg/m3

Ventilation: Local exhausts to remove airborne particles

Protective Gloves: Recommended

Eye protection: Safety glasses or goggles

Other protection: none

Hygienic practices: Wash thoroughly after handling

The information provided in this Material Safety Data Sheet has been compiled from our experience and data from similar commercially available materials and is believed to be accurate. No guarantees of accuracy is made or implied. It is the users responsibility to determine the suitability of this information for the adoption of necessary safety precautions and disposal procedures.

PLEASE BE ADVISED THAT THIS MATERIAL SAFETY DATA SHEET IS INTENDED FOR INDUSTRIAL PURCHASES WHICH MY USE LARGE QUANTITIES OF THE PRODUCT. DEPENDING ON

THE SCOPE OF TOXICOLOGICAL TESTS CONDUCTED ON THE FORMULATION AND/OR THE RAW

MATERIALS, THE LISTED HAZARD DATA MAY REFLECT HAZARDS RELATED TO THE FORMULATION AS A WHOLE OR TO INDIVIDUAL COMPONENTS AT 100% CONCENTRATION. THEREFORE, CERTAIN WARNINGS AND HAZARD STATEMENTS CONTAINED ON THIS MSDS MAY NOT BE APPLICABLE TO OR INCLUDED IN THE PACKAGE LABELING AVAILABLE TO THE GENERAL PUBLIC.

Print this page.

LE SLEDWIN - WILLIAMS COMPANY

TECHNICAL DATA SHEET



4772 POLYACRYLATE BLENDING POLYMER

PRODUCT DESCRIPTION

General Polymers 4772 POLYACRYLATE BLENDING POLYMER is a liquid polymer that adds strength to cementitious mortar. This additive is combined with hard aggregates and cement to form a thin-set terrazzo mixture or as a primer for cementitious mortars.

ADVANTAGES

- Resists Freeze/Thaw cycling
- Improves bond strength
- · Water resistant and non-shrinking
- Can be applied to damp surfaces
- Breathable
- · Available for vertical applications

TYPICAL USES

4772 POLYACRYLATE BLENDING POLYMER is the liquid resin component for #801 POLYACRYLATE Terrazzo flooring, a primer for polyacrylate cement base mortars, and as a polymer modifier of Portland Cement. The polymer additive allows these mortars to maintain a thermal coefficient of expansion similar to concrete.

TYPICAL PHYSICAL PROPERTIES @ 73F

Mix Ratio A:B		Single Component
Color		White
VOC (Volatile Organic Content)		- 0 - (water-based)
Cure Time	Dry to Touch	5 hours
	Full Cure	28 days

LIMITATIONS

- Not to be used as a stand-alone product.
- Substrate must be structurally sound, free of standing water and free of bond inhibiting contaminants.
- During installation and initial cure cycle substrate and ambient air temperature must be at a minimum of 50F
- Strictly adhere to published coverage rates.

SURFACE PREPARATION

Proper inspection and preparation of the substrate to receive resinous material is critical. Read and follow the "Instructions for Concrete Surface Preparation" (Form G-1) for complete details.

APPLICATION

MATERIAL DELIVERY AND STORAGE

Store materials in accordance with the instructions, with seals and labels intact and legible. Maintain temperature within required range. DO NOT ALLOW MATERIAL TO FREEZE

INSTALLATION

We understand that you want the system installed right the first time. Therefore, an exclusive group of local specialty contractors has been selected for their experience, expertise, stability and, most importantly, their commitment to quality and owner satisfaction.

Materials are to be installed per the Installation Instructions. Refer to and follow MSDS Safety Recommendations.

CHEMICAL RESISTANCE

For comprehensive chemical resistance information, contact the Technical Service Department.

MAINTENANCE

Caution: Some cleaners will affect the color or texture of your polymer floor surfaces. To determine how your cleaner will perform, we recommend that you first test each cleaner, in a small area, utilizing your cleaning technique. This precaution will demonstrate the effect of your cleaner and technique, if no deleterious effects are observed, continue with the procedure. If deleterious effects do occur, modify the cleaning material and/or procedure.

WARRANTY

The sale of General Polymers Brand products is governed by the Standard Terms and Conditions of Sale. Sherwin-Williams has no knowledge or control concerning buyer's use for the product nor over the quality of the concrete or substrate to which they are applied. Sherwin-Williams assumes no responsibility for any loss or damage resulting from the handling or use of the products by the buyers. Sherwin-Williams makes the following LIMITED WARRANTY that its products have been supplied free from manufacturing defects, and will conform to Sherwin-Williams manufacturing standards. Technical data furnished is true and accurate to the best of our knowledge; however, no guarantee of accuracy is given or implied.

SHERWIN-WILLIAMS' LIABILITY SHALL NOT EXCEED REPLACEMENT OF OR RETURN OF THE PURCHASE PRICE FOR THE PRODUCTS WHICH IT MAY SELL WHICH MAY PROVE TO BE DEFECTIVE UNDER NORMAL USE AND SERVICE WITHIN ONE YEAR FROM DATE OF SALE AND WHICH UPON EXAMINATION BY SHERWIN-WILLIAMS SHALL DISCLOSE, TO SHERWIN-WILLIAMS' SATISFACTION, TO BE DEFECTIVE. IN NO EVENT SHALL SHERWIN-WILLIAMS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, BUYERS LOSS OF MATERIAL OR PROFITS, INCREASED EXPENSE OF OPERATION, BODILY INJURY, LOSS OF USE OF PROPERTY, OR DOWNTIME. SHERWIN-WILLIAMS MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. THE BUYER HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.

This Limited Warranty shall be governed by and construed in accordance with the internal laws of the State of Ohio without regard to the principles of conflicts of laws. Any controversy or claim arising out of or relating to this Limited Warranty or alleged breach thereof, shall be settled by mediation under the Construction Industry Mediation Rules of the American Arbitration Association. If, within thirty (30) days after service of a written demand for mediation, the mediation does not result in settlement of the dispute, then any unresolved controversy or claim arising from or relating to this Limited Warranty or alleged breach thereof shall be settled by arbitration administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules and judgment on the award rendered by the arbitrator(s) shall be final and binding on the parties and may be entered in any court having jurisdiction thereof. All such mediation and arbitration shall take place in Cleveland, Ohio. This Limited Warranty supersedes any other warranty or other representation, whether written or oral, hereto made between parties.



Cincinnati, OH (800)543-7694